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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/628,839	07/31/2000	Richard M. Shupak	777.388US1	5501

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EXAMINER

GROSS, KENNETH A

ART UNIT

PAPER NUMBER

2122

DATE MAILED: 09/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/628,839

Applicant(s)

SHUPAK, RICHARD M.

Examiner

Kenneth A Gross

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-56 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-56 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to the amendment filed on July 7th, 2003.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claim 19, 20, 22-26, 33, 35, 37, and 43-48 is rejected under 35 U.S.C. 102(b) as being anticipated by Buzbee (U.S. Patent Number 5,815,720).

For specific rejections of Claims 19, 20, 22-26, 33, 35, 37, and 43-48, see the office action mailed on April 8th, 2003 (Note: Claims 45 and 48 have been amended, however, the scope of the claims have no changed).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 1-11, 13-15, 17, 18, 28-32, 38, 41, and 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kaneshiro et al. (U.S. Patent Number 5,950,003) in view of "Compilers: Principles, Techniques, and Tools" by Alfred Aho (hereinafter Aho).

For specific rejections of Claims 1-11, 13-15, 17, 18, 28-32, 38, 41, and 42 see the office action mailed on April 8th, 2003 (Note: Claims 1, 2, 11, and 28 have been amended, however, the scope of the claims have no changed).

In regard to Claim 49, Kaneshiro teaches arguments passed to the function calls (Column 8, lines 8-11).

In regard to Claim 50, Kaneshiro shows that the function calls contain parameters (Column 8, Table 1).

6. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kaneshiro et al. (U.S. Patent Number 5,950,003) in view of "Compilers: Principles, Techniques, and Tools" by Alfred Aho (hereinafter Aho) and further in view of Shridhar (U.S. Patent Number 5,815,714).

For specific rejections of Claim 12, see the office action mailed on April 8th, 2003.

7. Claims 21, 27, 34, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buzbee (U.S. Patent Number 5,815,720) in view of Kaneshiro et al. (U.S. Patent Number 5,950,003).

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For specific rejections of Claims 21, 27, 34, and 36, see the office action mailed on April 8th, 2003 (Note: Claims 34 and 36 have been amended, however, the scope of the claims have not changed).

8. Claims 39 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over “Compilers: Principles, Techniques, and Tools” by Alfred Aho (hereinafter Aho) in view of Kaneshiro et al. (U.S. Patent Number 5,950,003).

For specific rejections of Claims 39 and 40, see the office action mailed on April 8th, 2003.

9. Claims 51-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buzbee (U.S. Patent Number 5,815,720) in view of Kaneshiro (U.S. Patent Number 5,950,003).

In regard to Claim 51, Buzbee teaches the method of Claim 19, but does not teach that the annotation information is generated via an annotation function within source code associated with the executable program. Kaneshiro, however, does teach placing function calls in the source code to generate profile information (Column 5, lines 65-67 and Column 1, lines 59-64). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to perform the method of Claim 19, where the annotation information is generated via an annotation function within source code associated with the executable program, since function calls are a much easier and much more compact, and hence neater way of running multiple lines of code in a source program.

In regard to Claims 52-56, Claims 52-56 are rejected under the same logic as rejected Claim 51 above.

Response to Arguments

10. Applicant's arguments filed on July 7th, 2003 have been fully considered but they are not persuasive.

Specifically, in regard to Claim 19, the applicant argues that Claim 19 recites "reading annotation information in an executable computer program", which is different from what Buzbee teaches. The applicant states that Buzbee teaches executable statements that optimize code determined by the profile information. While this is true, Buzbee also teaches profile information (Column 3, lines 56-57) which can be equated to non-executable annotation information, which is used during a second compilation to optimize the application (Column 3, lines 63-65). The profiling codes, as taught by Buzbee, are code segments that generate the profiling information.

In regard to Claims 24-26, 33, 35, and 43-48, the applicant states that Buzbee does not even mention having non-executable information within the executable computer program. However, Buzbee does teach profile information, which is non-executable information within the executable program. Furthermore, Buzbee teaches having annotations within the computer program to direct the generation of profiling information (Column 2, lines 20-34).

In regard to Claim 1, the applicant argues that Kaneshiro teaches away from inserting annotation codes in the source code, as recited in Claim 1. Kaneshiro, however, teaches that inserting annotation codes into the source code is a *must* (Column 1, lines 59-64). The applicant further argues that Kaneshiro does not teach, "transforming the annotation representation into intermediate language code". Kaneshiro, however, does teach transforming code during compilation into an intermediate representation before outputting the executable (Column 7,

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lines 62-65). Finally, the applicant argues that Aho does not teach generating annotation information from the intermediate language code, and that there is no motivation to combine Kaneshiro with Aho. The motivation to combine Kaneshiro with Aho is the fact that Kaneshiro teaches a method of optimizing by use of a compiler, and Aho teaches a more low-level look at the workings of a compiler, allowing the benefit of combining compiler features taught by Aho in the compilation method of Kaneshiro. Furthermore, Aho does teach generating a symbol table *based* on the source code, however, Aho also teaches generating from the source code an intermediate language and intermediate representations of the source code. While a lexical analyzer is parsing the source code, it is transformed into a number of lexical tokens, which the compiler reads, and enters into a symbol table (Page 11, lines 12-13). Hence, the lexical analyzer will parse the annotation representation into an intermediate language, and enter it into a symbol table.

In regard to Claim 14, the applicant argues that Kaneshiro teaches away from inserting annotation codes in the source code, as recited in Claim 1. Kaneshiro, however, teaches that inserting annotation codes into the source code is a *must* (Column 1, lines 59-64).

In regard to Claims 15-18, the applicant argues that there is no motivation to combine Kaneshiro with Aho. The motivation to combine Kaneshiro with Aho is the fact that Kaneshiro teaches a method of optimizing by use of a compiler, and Aho teaches a more low-level look at the workings of a compiler, allowing the benefit of combining compiler features taught by Aho in the compilation method of Kaneshiro. Further, the applicant argues that Aho does only teaches storing attributes of the parameter and not 'string parameters'. However, if the applicant is referring to the name of the parameter, these values are stored as well (Page 432, Figure 7.32).

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Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

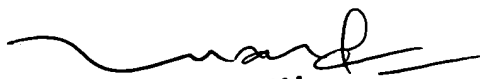
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth A Gross whose telephone number is (703) 305-0542. The examiner can normally be reached on Mon-Fri 7:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q Dam can be reached on (703) 305-4552. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

KAG


TUAN DAM
SUPERVISORY PATENT EXAMINER